Changes in contact and support within intergenerational relationships in the Netherlands: A cohort and time-sequential perspective

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CHANGES IN CONTACT AND SUPPORT WITHIN INTERGENERATIONAL RELATIONSHIPS IN THE NETHERLANDS: A COHORT AND TIME-SEQUENTIAL PERSPECTIVE

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ABSTRACT

This study investigates whether the frequency of contact and support exchanged in relationships between parents and adult children declines over successive cohorts and over individual time in the Netherlands. Respondents included a birth cohort from 1928 to 1937 with data collected in 1992 (N=941) and in 2002 (N=574) and a birth cohort from 1938 to 1947 with data collected in 2002 (N=884). We assessed cohort and time-sequential changes. Parents of the later cohort had more contact and support exchanges with their children than the earlier cohort, revealing that families have not declined in importance. Furthermore, longitudinally, contact and supportive exchanges with adult children

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decreased, suggesting that parents and children devote less time to intergenerational relationships during this ''empty nest'' phase.

INTRODUCTION

One of the most profound and dramatic demographic changes that Western societies have witnessed during the 20th century has been the aging of the population, resulting in both longer years of linked lives between generations and longer lives as parents and adult children than ever before in human history. At the same time, birth rates have decreased in many Western countries, lowering the number of children available as potential supporters (De Jong Gierveld, 1998; Suitor, Pillemer, Keeton, & Robison, 1995). Moreover, the impact of industrialization and modernization seems to have eroded the families' traditional functions (Burgess, 1916), shifting responsibility from the family to a public solidarity system. The notion that in the past, parents were supported more by their offspring is based on the assumption that the disintegration of the family is an artifact of modernization (Aboderin, 2004; Hareven, 1995; Shanas, 1979). However, in the past century, research on intergenerational relationships beyond the nuclear household has indicated the continuation of family bonds (Troll, 1971). Parents and children have frequent contact and continue to engage in mutually supportive patterns of exchange (Mancini & Blieszner, 1989). Despite this evidence, the notion of a ''breakdown'' of family support persists in both popular and professional perceptions (Aboderin, 2004).

Studies on social change and relationships between parents and adult children are scarce and have so far been done primarily on very old parents. One of the few examples of recent research on social change and intergenerational relationships is a cross-national, multisample study conducted by Silverstein, Burholt, Wenger, and Bengtson (1998). They compared parent–child relationships among very old parents (M age = 86) in Wales with those of parents (M age = 85) in Los Angeles and, nationally, in the United States. The data for the Wales, Los Angeles and U.S. National sample were collected between 1990 and 1995. Wales is characterized as being more traditional and generally more rural than the U.S., and the expected differences between Welsh and American parents were interpreted as being attributable to modernization. Contrary to expectations, only a few differences were observed. There were more geographically close relationships among the Welsh parents and the contact frequency was higher, but

there were no differences observed in the amount of support exchanged. Silverstein and colleagues explained this by assuming that the situations of both countries are similar and that the social and economical process of modernization in Wales could be compared to that of the United States. However, Aboderin (2004) casts doubt on the underlying assumption of uniform societal development, which predicts the same "breakdown" of family support within different countries and within different periods of time. She also questions whether the process is taking place in the same manner in different countries.

A European study by Vollenwyder, Bickel, d'Epinay, and Maystre (2002) compared changes in contact frequency between older people (65–79 years of age) and their families in two surveys carried out in Switzerland in 1979 and 1994. Their findings showed an increase in contact across cohorts, which can partly be explained by structural factors, such as a decline in family size, an increase in proximity of children and improvements in means of communication (cars and telephones). The authors suggest that specific family cultures based on religious beliefs and practices may also play a role in family relations.

These studies depart from the argument that macrostructural trends within Western societies have changed the structure and therefore reduced the functions of families. Although societal factors are considered, studies supporting this argument only offer broad propositions to explain a decline in contact and support between parents and adult children. These explanations are primarily drawn from major transformations such as industrialization, urbanization, the spread of the market economy and the growing influence of values of individualization. What is lacking, however, is an explicit account of the individual consequences of the macrostructural trends that have taken place. Much of the attention that the relationship between parent and adult child has received has been focused on the influence of demographic changes such as the decrease in birth rate, increase in divorce and decrease in intergenerational coresidence. Less attention has been given to the relationship itself. Social and demographic changes may indeed weaken these relationships, but claims of a decline in intergenerational solidarity between parents and children call for careful and rigorous analysis of the evidence for trends in contact and support. Based on the predominantly held assumption of family decline, we derive and test the following hypothesis: *Social and demographic changes reduce the opportunities for contact and support exchange between parents and adult children.* This hypothesis requires that a family decline is evident in our data that will also be the subject of our study.

In this study, we focus on societal trends and apply a broader life-course perspective than has been done in previous studies. We examine changes in relationships between parents (aged about 60 years) and their adult children (aged about 30 years) using individual-level data on contact and support in the Netherlands in the 1990s. This category of middle-aged parents has been addressed less in previous research and is characterized by parents still in good health who are entering a period of (pre)retirement and an "empty nest" transition when children leave home. For adult children, this is a period in the life course characterized by ending schooling, getting married, having children and becoming a member of the labor force (White & Rogers, 1997). In this period, adult children are more focused on labor participation and the demands of their new families (Rossi & Rossi, 1990).

The main question of this article addresses whether, and if so, to which extent the individual consequences of macrostructural trends are related to contact and support exchange between parents and adult children. Specifically, we focus on the three major trends: divorce, labor-force participation and geographical proximity in parent–child residential location. In addition, we apply a cohort and time-sequential analysis of contact frequency and the exchange of instrumental and emotional support within relationships between parents and their children. Specifically, we compare two birth cohorts: The relationship characteristics of parents interviewed in 1992 were compared with those of parents of the same age at the time of the interview conducted in 2002 (reflecting *cohort* and *period effects*). Has contact and support increased or decreased in the population across time, displaying "period effects"? Do later generations ("cohorts") receive more or less contact and exchange more or less support than earlier ones?

Trends, such as improved employment opportunities for women, that were in progress when the earlier cohort reached retirement age in the 1990s, were more firmly established a decade later at the beginning of the 21st century. Therefore, we assume that social circumstances have different effects on the two cohorts. Social developments not only affect the young but also those in later life, which is addressed by the longitudinal design of this study, in which changes were assessed over the 10 years the continued parent–child relationships were studied (*age* and *period effects*). Is more or less contact and support exchanged as people age? Trends in, for example, female labor-force participation might be related to developments in contact and support exchange. The pressure of combining employment and care giving responsibilities might lead to less contact and support between older parents and adult children.

By presenting more evidence on age, period and cohort effects, we hope to get a better understanding of changes in intergenerational relationships and provide more definite indications about what such changes might mean for our society. Drawing on prior research, we further develop the rationale for focusing on divorce, labor-force participation and geographical proximity in parent–child residential location.

Consequences of Opportunities

As in many other Western societies, there has been a strong increase in divorce in the Netherlands over the past decades. From the mid-1960s to the mid-1980s, the rate of divorce increased and still remains at a high level, with almost one in four contemporary marriages in the Netherlands eventually ending in divorce (De Jong, 1999). By international comparisons, the divorce rate in the Netherlands is at an intermediate level. Marriage cohort tables show that divorce increased from 2% after five years of marriage for couples married in 1960 to about 13% for couples married in the early 1990s (Kalmijn, De Graaf, & Poortman, 2004). Popenoe (1993) contends that this increase has major consequences, changing the structure and further reducing the functions of families, and divorce has been found to have an adverse effect on parent–child relationships (Aquilino, 1994; Eggebeen, 1992). Specifically, these studies suggest that divorce results in less contact and instrumental and emotional support between the divorced parent and the child.

Another important change that has occurred is the increased labor-force participation of women, who are more often involved in maintaining intergenerational relationships than males (Spitze & Logan, 1990). In regard to the 1990s in the Netherlands, the increased labor-force participation of women is of special interest because it occurred relatively late. Female labor-force participation only started to increase in the 1970s, when 29% of the women between 15 and 64 years of age were employed (Social and Cultural Planning Office, 2000). Labor participation was stable at 30% up to 1985 and increased after that to 39% in 1990 and 53% in 2001 (Portegijs, Boelens, & Keuzenkamp, 2002). The largest increase is observed within younger cohorts of women (25–54 years of age), compared to older cohorts (55–64 years of age). The current female employment rate in the Netherlands is now higher than the European Union average; however, most female employment is part-time, and currently the Netherlands has the highest proportion of women working part-time, compared to other

Western countries (Portegijs et al., 2002). While past research is not clear on the effect that employment has on intergenerational support patterns, it has been found to have a negative effect on the quality of the relationship between adult daughters and their parents (Kaufman & Uhlenberg, 1998).

Furthermore, geographical proximity in parent–child residential location is strongly associated with frequency of contact and exchange of support (Lawton, Silverstein, & Bengtson, 1994). Coresidence of parents with their adult children is associated with higher levels of interaction and more support exchange than living nearby (White & Rogers, 1997). Liefbroer and De Jong Gierveld (1995) calculated for the Netherlands that in 1965, 55% of men and 44% of women at age 60 were coresiding with one or more of their children; in 1990 these percentages were 33% and 22%, respectively. As data from the current study shows, in 2002 a further decline in intergenerational coresidence was observed: 23% and 16%, respectively. Furthermore, when parents and children do not coreside, geographic proximity concerns differences between children living nearby, for example in the same neighborhood, or children living at a large traveling distance. Although there are no data on historical trends in the Netherlands available in the period under study, the current study shows an increase in children's geographical proximity concurrent with a decline in coresidence.

Control Variables

Finally, there are a number of other parent and child characteristics that may have consequences for the contact and support between parents and children. The age of parents and children could be related to contact and support exchange (Morgan, Schuster, & Butler, 1991). The older one is, the more support one receives and the less support one gives to others, irrespective of changes in health (Van Tilburg & Broese van Groenou, 2002). Other characteristics we took into account were the number of children. It is plausible that parents with more children have less contact and support exchange with each of them. Also, educational level and functional capacity were taken into account. Older adults with a higher education have less contact (Greenwell & Bengtson, 1997), receive less instrumental support and give more support than those with a lower education (Broese van Groenou & Van Tilburg, 2003). Functional limitations provide fewer opportunities to give (instrumental) support and are an indicator of more need for (instrumental) support (Van Tilburg & Broese van Groenou, 2002).

In addition to respondent characteristics, we examined the influence on contact and support exchange of a child's partner status and having children of their own. Previous studies show that children who are divorced or single have poorer relationships with their parents than married children (Kaufman & Uhlenberg, 1998). Past research is not clear what effect having a grandchild has on the contact and support exchange between parents and children, but we expect that the presence of grandchildren might reduce contact frequency and support exchange. We also included the influence of gender on contact and support exchange: In general, females are more involved than males in maintaining intergenerational relationships (Spitze & Logan, 1990). Also, same-sex dyads differ from cross-sex dyads. Children often identify more strongly with the parent of the same sex (Aquilino, 1994; Lee, Dwyer, & Coward, 1993); specifically, the mother–daughter relationship is found to be closer than other dyad types.

METHODS

Respondents

Data were obtained from two surveys of the aging population in the Netherlands. The first survey was carried out in 1992. Face-to-face interviews were conducted with 4,494 respondents in the research program "Living Arrangements and Social Networks of Older Adults" (Knipscheer, De Jong Gierveld, Van Tilburg, & Dykstra, 1995). The program used a stratified random sample of men and women born between 1903 and 1937. The sample was taken from the population registers of 11 urban and rural municipalities, regions that represent differences in religion and urbanization in the Netherlands. The oldest individuals in these areas, particularly the oldest men, were over-represented in the sample. Respondents were interviewed in their homes, and personal computer assistance (CAPI) was used in the data collection. Of the 6,107 eligible individuals in the sample, 2,302 were unwilling to participate due to a lack of interest or time; another 734 were ineligible because they had died or were too ill or cognitively impaired to be interviewed. The cooperation rate was 62%, which is relatively high compared to many surveys in the Netherlands where participation rates are low (Bethlehem & Kersten, 1982). For the second survey, conducted in 2002, the Longitudinal Aging Study Amsterdam (LASA) (Deeg, Knipscheer, & Van Tilburg, 1993) sampled a new cohort (birth years 1938–1947, $N = 1002$) from the same sampling frame as the

earlier cohort, with a cooperation rate of 57%. For the study reported here, from the 1992 data collection, the birth cohort 1928–1937 was used ($N = 1{,}137$), resulting in data from two consecutive birth cohorts within the same age range (55–65 years) with an interval of 10 years. We will refer to these cohorts as the *early* (born in 1928–1937) and the *late* cohort (1938–1947).

The following respondents were not included: those who had no children ($n = 150$ for the early cohort and $n = 105$ for the late cohort), those who had children that were all younger than 18 years ($n = 12$ and $n = 4$, respectively), and those whose interviews had to be shortened or broken off because of frailty ($n = 34$ and $n = 9$, respectively). This resulted in 941 respondents in the early cohort with a total of 2,816 children ($M = 3.0$, SD = 1.5) and 884 respondents in the late cohort with 2,211 children ($M = 2.5$, SD = 1.2) for whom data were available.

For the early cohort, follow-ups were conducted in the context of LASA in 1992–1993, 1995–1996, 1998–1999 and 2001–2002. Data on all the children were collected only at the 2001–2002 observation, which is used as T2 in the current study. The T2 interviews were conducted between 9.4 and 10.6 years after T1 (9.9 years later, on average), resulting in data for 574 respondents with 1,673 children ($M = 2.9$, SD = 1.4). Reasons for attrition (in total 39%) between T1 and T2 were the death of the respondent (12% of the original sample of 941), refusal (14%), severe physical or mental health problems (2%) or the respondent having moved to an unknown destination or abroad (2%). Missing data caused further exclusion: 6% of the respondents had a short interview by phone or by proxy and 3% of the interviews had to be shortened or broken off because of frailty. Furthermore, 12 children had died and two parents had lost their only child by death. The attrition caused by refusal resulted in a sample with a lower contact frequency ($M = 167$ days per year for the 1,673 relationships included in the longitudinal study, compared to $M = 187$ for the 403 relationships of respondents who refused further cooperation, $p < 0.01$), emotional support given more often by the parent (76% versus 67%, $p < 0.01$), instrumental support given more often (55% versus 47%, $p < 0.01$) and instrumental support received more often by the parent (43% versus 34%, $p < 0.01$). No significant differences were observed for emotional support received (81% and 78%, respectively) and whether the child was identified as a member of the personal network (90% and 88%, respectively). This selection does not clearly indicate that respondents with poor intergenerational relationships ended their cooperation with the study.

Measurements

A question was posed about contact frequency in all the parent–child relationships: ''How often are you in touch with X?'' Contact frequency was classified into eight categories from less than once a year to daily, and was converted to number of days per year. It was assumed that there was daily contact between a child and a parent sharing the household. As Table 1 shows, intergenerational contact is frequent, on average. Questions on supportive exchanges were posed to a selection of the relationships (i.e., those with children included in the personal network). To obtain adequate information on their networks, the older parents were asked to identify their personal network members by name. The main objective of this was to identify a network that reflected the socially active relationships of the older adult in the core as well as the outer layers of the larger network (Van Tilburg, 1995). This procedure was adopted from Cochran, Larner, Riley, Gunnarson, and Henderson (1990). The following question was posed: ''Name the people you have regular contact with and who are important to you.'' Only people above the age of 18 could be named. For a subset of the identified network members (i.e., the 10 with the highest frequency of contact) questions were asked about support. The average network size was about 14, and the number of identified network members ranged from 0 to over 70. Restrictions in the data collection forced us to ask questions about support for a limited number of network members. The question about receiving instrumental support was: ''How often in the past year did X help you with daily chores in and around the house, such as preparing meals, cleaning the house, transportation, small repairs, or filling out forms?'' The question about receiving emotional support was: ''How often in the past year have you told X about your personal experiences and feelings?'' With respect to support given, the questions were reversed. The data structure required multilevel analyses (see below) and the logistic approach fitted best with the ordinal measurement level of the support exchanges. The answer categories ''never'' and ''seldom'' were contrasted to the categories ''sometimes'' and ''often.'' On average, emotional support is exchanged more often than instrumental support, and parents report that they provided instrumental support more often than they received this type of support.

In a secondary study, we investigated whether there were any differences between the reports of both parents and those of some of their children as respondents ($n = 218$ relationship pairs). Correlations between the parents' and child's reports on supportive exchanges were between 0.34 and 0.40,

Table 1. Means and Percentages of Variables Used in the Analyses for the Early and Late Cohort and Longitudinally for T1 and T2.

Cohort Observation	Early (1928–1937) T1 (1992)	Late (1938–1947) T1 (2002)	Early (1928–1937) T1 (1992)	Early (1928–1937) T2 (2002)
Respondent characteristics	$N=941$	$N=884$	$N=574$[a]	$N=574$
Age	59.4	60.0***	59.2	69.0[b]
Number of children	3.04	2.52***	2.94	2.91[b,c]
Number of children aged 0–17 years	0.05	0.05	0.03	0.00
Number of children in household	0.45	0.26***	0.45	0.06***
Marital history and status		***		***
Never married, currently no partner	0%	0%	0%	0%
First marriage	80%	73%	82%	71%
Ever divorced, currently married or partnered	5%	10%	5%	5%
Ever divorced, currently no partner	3%	8%	3%	3%
Ever widowed, currently married or partnered	5%	4%	3%	4%
Ever widowed, currently no partner	8%	5%	7%	17%
Educational level (years)	9.3	10.2***	9.6	[d]
Employment		***		***
Not employed	69%	60%	65%	91%
Employed part-time	11%	17%	12%	7%
Employed full-time	21%	23%	24%	2%
Functional capacity (6–30)	29.2	28.6***	29.5	28.3***
Child characteristics	$N=2,816$	$N=2,211$	$N=1,673$[a]	$N=1,673$
Age	30.0	31.4***	29.7	39.7[b]
Partner (no, yes)	70%	75%***	69%	84%***
Children (no, yes)	41%	45%**	41%	72%***
Employment		***		***
Not employed	28%	16%	28%	14%
Employed part-time	11%	19%	11%	23%
Employed full-time	61%	65%	61%	64%
Relationship characteristics	$N=2,816$	$N=2,211$	$N=1,673$[a]	$N=1,673$
Gender				
Father and son	24%	23%	25%	25%
Father and daughter	22%	24%	23%	23%
Mother and son	27%	29%	22%	22%
Mother and daughter	26%	25%	26%	26%
Geographic proximity		***		***
Coresiding	15%	10%	16%	2%
No coresidence; within 15 minutes traveling time	41%	45%	41%	44%
More than 15 minutes traveling time	44%	44%	44%	54%
Contact frequency (days per year)	167.4	166.0[c]	165.6	122.1[c]
Emotional support received (no, yes)	78%	83%[c]	73%	67%[c]
Emotional support given (no, yes)	74%	86%[c]	71%	73%[c]
Instrumental support received (no, yes)	41%	48%[c]	41%	38%[c]
Instrumental support given (no, yes)	53%	65%[c]	53%	46%[c]

Note: (Paired) *t*-tests were applied for interval variables; χ^2-tests for nominal variables.

[a]A subsample of the sample described in the first column.

[b]Difference not tested.

[c]For T1 including 12 children who died between T1 and T2.

[d]No T2 observation.

[e]Difference examined in the multilevel models.

*$p<0.05$;

**$p<0.01$;

***$p<0.001$.

indicating the subjective nature of the measurements. Reports on frequency of contact were more highly correlated ($r = 0.71$) and the traveling time reported by the parents was strongly correlated ($r > 0.79$) with the time reported by the child, as well as the distance in a straight line and traveling distance and time by car, as obtained from public databases.

Only adult children were included in the analysis because non-adult children predominantly live with the parent and, consequently, have daily contact, so no data are available on support exchange for children under 18 years because these children were not included in the network. As a result, 44 children were excluded from the early cohort at T1, leaving 2,772 relationships; 18 were excluded at T2, leaving a total of 1,655 children for the longitudinal analyses and 41 from the late cohort.

Data on support were not available for all relationships. A number of children were not identified within the network. Of the 2,772 adult children of the early cohort, 90% were identified as network members at T1, and 94% of the 1,673 at T2 were so identified (the difference was significant at $p < 0.01$). For the late cohort, who had 2,211 adult children, 94% were identified as network members (the difference with the early cohort was significant at $p < 0.001$). It is interesting to note that not all the children identified in the network were among the 10 with the highest contact frequency. Data on support were available for 2,239 relationships at T1, for 1,302 relationships at T2, and for 1,804 relationships within the late cohort. Reasons for loss of children were that other network members were identified among the parents' 10 network members with the highest frequency of contact and, in a number of cases, respondents had more than 10 children. The reasons for not having support data differed longitudinally ($p < 0.001$): For the early cohort at T1, 10% of the children were not included in the network and 8% were not among the 10 with the highest frequency of contact; for T2, this was 7% and 16%, respectively. Therefore the analyses were restricted to relationships for which data on support exchange were available for both T1 and T2. The reasons for not having support data also differed between the cohorts ($p < 0.001$): For the early cohort, 11% of the children were not included in the network and 7% were not among the 10 with the highest frequency of contact; for the late cohort, these numbers were 6% and 10%, respectively. However, the proportion of children for whom data on support exchange was available did not differ (82% and 84%, respectively, $p > 0.05$).

The following characteristics were included for each respondent: age, number of children and number of children in the household, marital history and status, employment status, education and functional capacity.

Marital status is time-specific and covers previous changes in marital status (divorce or widowhood) that might affect contact and support exchange with children. We distinguished between never married and not having a partner, being in the first marriage (including a small number of respondents who never married and lived with their partner), ever divorced or widowed and remarried or repartnered, and ever divorced or widowed and not having a partner relationship. We present the distribution in Table 1. Between the early and late cohort, a significant increase was observed in those who were ever divorced. Because of death, over time we observed a strong increase in widowed parents without a partner.

Educational level was measured in years. The late cohort had more years of education than the early cohort. Since it was expected that only a few respondents attended school after T1, the educational level at T2 was not observed. The respondent's employment status was assessed with a single question: ''Are you currently employed?'' The working respondents were asked the number of hours a week they worked according to their employment contract. In the absence of a contract (e.g., because the respondent was self-employed), an approximation of the actual number of hours was asked (*full-time* was defined as 28 hours or more per week). An increase in both full-time and part-time employment was observed between the early and late cohorts. As would be expected, longitudinally we observed an increase in the number of respondents who were not employed.

Functional capacity was measured with six questions about having difficulty performing the activities of daily living, such as, ''Can you walk up and down stairs?'' The five possible answers were ''not at all,'' ''only with help,'' ''with a great deal of difficulty,'' ''with some difficulty'' and ''without difficulty,'' ranging from 6 (*poor*) to 30 (*good capacity*). The psychometric properties were satisfactory (Loevinger's coefficient of homogeneity $H \geq 0.46$, reliability $\rho \geq 0.79$). The early cohort had a slightly greater functional capacity than the late cohort. This could be because selection effects played a role (i.e., either selective dropout in our sample or in the population, which could be caused by some people, who might otherwise have died, surviving into the late cohort). Longitudinally, there was a decrease in functional capacity, most likely because the respondents were 10 years older.

Information about the children's gender, age, whether they had children of their own, and partner and employment status was collected from the parent. Between the early and late cohorts, there was a small increase in the number of adult children with children of their own. An increase was also observed between the early and late cohorts and longitudinally in the

number of children with a partner. This might be related to the somewhat higher age of children in the late cohort. Employment of a child was assessed with a single question: "Does X have a job, and if so does s/he work full-time or part-time?" We found an increase in employment across both cohorts and longitudinally, with children working part-time more often.

To measure relationship characteristics, the gender of the parent and child were combined to distinguish between same-sex and cross-sex relationships. The distribution on the relationship level presented in Table 1 does not show the gender distribution of the parents. Of the parents, 53% among both the early and late cohorts were female. Longitudinally, 51% were female. Information was also collected on whether adult children shared a household with parents, and when they did not live with their parents, information was asked about the traveling time to a child. The geographic proximity was analyzed as a nominal variable with three categories: a child shared the household with a parent; lived nearby, arbitrarily chosen as a traveling time of 15 minutes or less; or lived farther away, a traveling time of more than 15 minutes. Within the late cohort, a smaller number of children were sharing the household with a parent. More children lived nearby.

The distribution at the parental level was as follows: Within the early cohort, 30% of the parents coresided with one or more children, 47% did not share the household with a child and had at least one child living nearby, and 23% had no children living nearby. Within the late cohort, these percentages were 19%, 55%, and 26%, respectively. Longitudinally, almost all children had left the household. At T1, 244 children shared the household with a parent; 10 years later, most of them ($n = 216$) had left the parental home. There were a few children living independently at T1 who were coresiding with parents again at T2 ($n = 7$). In particular there was an increase in the percentage of children not living nearby. In contrast to the data on the relationship level, the data on the parental level shows an increase in having a child living nearby. Among the parents at T2, 5% coresided with one or more children (at T1 this was 31%), 64% did not share the household with a child and had at least one child living nearby (47% at T1), and 31% had no children living nearby (23% at T1).

Procedure

To assess differences in contact frequency and support exchange, we applied a hierarchical multilevel regression analysis (MLn) (Rasbash & Woodhouse, 1995). We assume that relationships of the same respondent

will be more alike than relationships of different respondents. Applying ordinary regression analysis to this kind of data set would violate the assumption of independence of error terms. One consequence would be that we would overestimate the number of degrees of freedom and, consequently, the significance of effects, leading to a number of spurious significances. However, the number of degrees of freedom is not the only subject of concern. Using ordinary regression analysis, the effects of respondents with many relationships would dominate the effects since they have a relatively large number of representations on a lower level. In multilevel analysis, variables from different levels (e.g., parents and children) are analyzed simultaneously; the statistical model includes the various dependencies. Analyses were performed with the scores of contact frequency as the dependent variable in a linear model. The unstandardized regression coefficients are presented. Emotional support received, emotional support given, instrumental support received and instrumental support given were dependent variables in logistic models. Two coefficients are presented for each explanatory variable: the logistic regression coefficient (the effect on the log-odds) and the effect on the odds. The last coefficient indicates the factor by which a change in an independent variable changes the odds of support exchanged.

To assess sequential changes in cohorts, the early and late birth cohorts were compared, with children and the relationships with their parents nested within the parents. In Model 1, in order to assess the general association of the two cohorts with contact frequency and support exchange, the equation included a dichotomous variable indicating membership in the early or late cohort. To assess whether parent, child and/or relationship characteristics influenced the frequency of contact and support exchange, the equation was further extended in Model 2 with the specific variables described above.

To assess time-sequential changes, the early cohort was compared over a 10-year period. Observations of contact frequency and support exchange at T1 and T2 are nested in the relationships, and the children and their relationships with parents are nested in the parents. The analyses were restricted to relationships for which data on contact frequency and support exchange were available for both T1 and T2. The two models were equal to the models for the cohort comparison, with the dummy for the cohort differences in the models replaced by the effect of time (i.e., the interval between T1 and T2).

Period and cohort effects are confounded in the cohort-sequential analysis; period and aging effects are confounded in the time-sequential analysis. It is assumed that the combination of both types of analysis contributes to the disentanglement of period, cohort and aging effects.

RESULTS

This study investigated whether there was a decline in frequency of contact and support exchanged between older parents and adult children in the Netherlands in the 1990s. First, a comparison was made between two birth cohorts and longitudinally over 10 years, assuming changes in both contact frequency and support exchanged. The results show that there was a decrease in frequency of contact between the early and late cohorts, from 172 days of contact to 169 days ($B = -2.9$; Table 2, Model 1); however, this difference is not significant. In contrast, parents in the late cohort exchanged significantly more support with their children than parents in the early cohort. We found that parents within the late cohort reported giving more support than they received. Specifically, the frequency of giving emotional support was higher than the frequency of giving instrumental support. What differences occur when we control for respondent, child and relationship characteristics in Model 2? With respect to contact frequency, we observed a difference of 11 days of contact per year in favor of the late cohort (Table 2, Model 2), whereas the estimates in Models 1 were not significant. The estimates of cohort effects in support exchanges were not strongly affected by the inclusion of parent, child, and relationship characteristics, except that receiving emotional support was no longer significant.

In comparison to the early cohort, the characteristics of respondents, children and relationships have the following effects on contact frequency (Table 2, Model 2) for the late cohort: In general, parents who have fewer children have on average more contact with their adult children; in other words, to a certain extent contact is spread among the children. Parents who were ever divorced, regardless of whether they are remarried or repartnered, and widowed parents who are remarried or repartnered have less contact with their adult children. Those who are widowed with no new partner have more contact with their children. Parents with a higher educational level have less contact with their children. The employment status of the parents has no significant effect. Furthermore, parents with younger or single children or children who have children of their own have more contact with their children. The employment status of the children has no significant effect. Mothers and daughters and parents with children who are coresiding or living within 15 minutes traveling time of parents have more contact.

There were some differences observed between exchanges of support and frequency of contact. Parents who have fewer children receive on average more emotional support but give more instrumental support. Ever-divorced

Table 2. Linear and Logistic Multilevel Model Results Predicting Intergenerational Contact and Support Exchange across Cohorts Using Full Maximum Likelihood Estimation ($N \leq 4{,}938$ Relationships from 1,825 Parents).

Variable	Contact Frequency (Days per Year)			
	Model 1		Model 2	
	B	SE	*B*	SE
Intercept	172.0***	3.4		312.8***
Cohort (0 = 1928–1937, 1 = 1938–1947)	−2.9	5.0	10.9**	4.2
Parent's age			−0.9	0.8
Parent's number of children			–11.0***	1.4
Parent's number of children aged 0–17 years			0.8	7.3
Parent's marital history and status (first marriage omitted)				
Ever divorced, currently married or partnered			−51.8***	7.7
Ever divorced, currently no partner			−20.7*	8.5
Ever widowed, currently married or partnered			−35.5**	11.2
Ever widowed, currently no partner			19.9*	8.0
Parent's educational level (years)			−2.8***	0.7
Parent's employment (not employed omitted)				
Employed part-time			−3.6	6.0
Employed full-time			2.3	5.7
Parent's functional capacity (6–30)			−0.7	0.7
Child's age			−2.1***	0.4
Child having partner (no, yes)			−19.1***	3.7
Child having children (no, yes)			20.3***	3.6
Child's employment (not employed omitted)				
Employed part-time			5.2	4.7
Employed full-time			−7.3	3.8
Gender				

Father and daughter									6.9		4.1	
Mother and son									−6.3		5.2	
Mother and daughter									27.9***		5.4	
Geographic proximity (>15 minutes omitted)												
Coresiding									236.3***		5.4	
No coresidence; within 15 minutes traveling time									64.2***		3.1	
Estimated parameters				1					22			
Deviance				61,742.6					59,177.6			

Variable	Emotional Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Intercept	1.29***	0.07	3.61	−2.32	1.45	0.10	1.04***	0.07	2.82	−1.79	1.43	0.17
Cohort (0=1928–1937, 1=1938–1947)	0.31**	0.11	1.37	0.23	0.12	1.26	0.82***	0.11	2.27	0.86***	0.12	2.36
Parent's age				0.03	0.02	1.03				0.02	0.02	1.02
Parent's number of children				−0.12**	0.04	0.89				−0.05	0.04	0.95
Parent's number of children aged 0–17 years				−0.02	0.20	0.98				0.17	0.21	1.18
Parent's marital history and status (first marriage omitted)												
Ever divorced, currently married or partnered				−0.15	0.24	0.86				−0.16	0.25	0.85
Ever divorced, currently no partner				−0.34	0.25	0.71				−0.71**	0.24	0.49
Ever widowed, currently married or partnered				−0.08	0.34	0.92				−0.34	0.33	0.72
Ever widowed, currently no partner				−0.50*	0.22	0.60				−0.16	0.22	0.85
Parent's educational level (years)				0.09***	0.02	1.10				0.09***	0.02	1.09
Parent's employment (not employed omitted)												
Employed part-time				0.19	0.18	1.21				0.15	0.18	1.17
Employed full-time				0.13	0.16	1.14				−0.11	0.16	0.89
Parent's functional capacity (6–30)				0.04*	0.02	1.05				0.05*	0.02	1.05
Child's age				−0.02	0.01	0.98				−0.03*	0.01	0.97
Child having partner (no, yes)				0.01	0.13	1.01				−0.10	0.13	0.91
Child having children (no, yes)				0.12	0.12	1.12				−0.03	0.12	0.97

Table 2. (*Continued*)

Variable	Emotional Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Child's employment (not employed omitted)												
Employed part-time				0.27	0.17	1.31				0.37*	0.17	1.45
Employed full-time				0.18	0.13	1.19				0.17	0.13	1.18
Gender												
Father and daughter				0.34*	0.14	1.41				0.21	0.14	1.23
Mother and son				0.58***	0.15	1.79				0.31*	0.15	1.36
Mother and daughter				1.45***	0.18	4.25				1.10***	0.17	3.00
Geographic proximity (>15 minutes omitted)												
Coresiding				0.49**	0.18	1.62				0.02	0.18	1.02
No coresidence; within 15 minutes traveling time				0.08	0.11	1.08				−0.11	0.11	0.89
Estimated parameters	1			22			1			22		
Deviance	3,410.0			2,910.7			3,372.1			2,890.9		

Variable	Instrumental Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Intercept	−0.35***	0.06	0.70	5.25***	1.18	189.81	0.13*	0.06	1.14	−0.19	1.19	0.83
Cohort (0 = 1928–1937, 1 = 1938–1947)	0.30***	0.09	1.35	0.40***	0.10	1.49	0.54***	0.09	1.72	0.73***	0.10	2.07
Parent's age				−0.04*	0.02	0.96				−0.02	0.02	0.98
Parent's number of children				−0.05	0.03	0.95				−0.16***	0.03	0.85
Parent's number of children aged 0–17 years				−0.45*	0.21	0.64				−0.30	0.20	0.74

Parent's marital history and status (first marriage omitted)								
Ever divorced, currently married or partnered		−0.27	0.20	0.77		−0.35	0.20	0.70
Ever divorced, currently no partner		0.03	0.20	1.03		−0.35	0.20	0.70
Ever widowed, currently married or partnered		−0.24	0.27	0.79		0.28	0.28	1.33
Ever widowed, currently no partner		0.85***	0.18	2.34		−0.24	0.18	0.79
Parent's educational level (years)		0.01	0.02	1.01		0.01	0.02	1.01
Parent's employment (not employed omitted)								
Employed part-time		0.07	0.14	1.07		−0.32*	0.14	0.72
Employed full-time		−0.11	0.13	0.89		−0.32*	0.13	0.72
Parent's functional capacity (6–30)		−0.10***	0.02	0.91		0.09***	0.02	1.10
Child's age		−0.02	0.01	0.98		−0.03**	0.01	0.97
Child having partner (no, yes)		−0.10	0.10	0.91		−0.30**	0.10	0.74
Child having children (no, yes)		−0.06	0.10	0.95		0.15	0.10	1.16
Child's employment (not employed omitted)								
Employed part-time		0.21	0.13	1.23		0.29*	0.13	1.33
Employed full-time		0.16	0.11	1.18		−0.07	0.11	0.93
Gender								
Father and daughter		−0.09	0.12	0.91		0.10	0.12	1.11
Mother and son		−0.30*	0.13	0.74		−0.22	0.13	0.80
Mother and daughter		−0.11	0.13	0.89		0.12	0.14	1.13
Geographic proximity (>15 minutes omitted)								
Coresiding		1.50***	0.15	4.47		1.25***	0.16	3.49
No coresidence; within 15 minutes traveling time		0.47***	0.09	1.60		0.40***	0.09	1.49
Estimated parameters	1	22			1	22		
Deviance	5,272.7	4,825.0			5,165.1	4,760.0		

Note: e^B, Exponentiated B.
*$p<0.05$;
**$p<0.01$;
***$p<0.001$.

parents without a partner report giving less emotional support and widowed parents with no new partner receive more instrumental support but less emotional support. Educational level was only significant for emotional support. Although, employment status of parents has no significant effect on emotional support, parents who are employed give less instrumental support to their children. Parents with a higher functional capacity exchange more emotional support, give more instrumental support, and receive less instrumental support. Parents with younger children give less emotional and instrumental support. The partner status of the child has no significant effect on the exchange of emotional support; however, parents give more instrumental support to a child with no partner. Although having grandchildren plays a role in contact frequency, it does not affect the exchange of emotional or instrumental support. Respondents give more emotional and instrumental support when children are employed part-time. Both mothers and fathers exchange emotional support more often with their children; however, mothers receive less instrumental support from sons. Finally, parents exchange more instrumental support when children are coresiding or living within 15 minutes' traveling time. More emotional support is received from children coresiding with parents.

Longitudinally, we observed a decline in contact frequency of 44 days per year (Table 3, Model 1), indicating that as parent's age, they have less contact with their adult children. For instrumental support given and received and emotional support received, there were also negative effects longitudinally, indicating that between 1992 and 2002, there was a decrease in support exchanged. However, we did find an increase in the emotional support given to children as parents aged. With the introduction of respondent, child and relationship characteristics, there is still a decline in contact frequency of 20 days per year (Table 3, Model 2). In general, the estimates of longitudinal effects in support exchanges were either not affected or not strongly affected by the inclusion of parent, child and relationship characteristics, except that instrumental support given was no longer significant.

Overall, the characteristics of respondents, children and relationships had the same effects longitudinally on contact frequency (Table 3, Model 2) as was found between the two successive cohorts. We no longer found an effect of ever-divorced parents with no partner on contact frequency. Also, the longitudinal analysis showed more contact between fathers and daughters.

There were some differences observed between exchanges of support and frequency of contact, which are divergent to those found between the two successive cohorts and which we mention briefly here. Older parents

Table 3. Linear and Logistic Multilevel Model Results Predicting Intergenerational Contact and Support Exchange over Ten Years Using Full Maximum Likelihood Estimation ($N \leq 3{,}310$ Observations of 1,655 Relationships from 574 Parents).

Variable	Contact Frequency (Days per Year)			
	Model 1		Model 2	
	B	SE	*B*	SE
Intercept	169.9***	3.9	272.3***	65.0
Interval (years divided by 10)	−44.2***	3.2	−20.2***	3.7
Parent's age			−0.7	1.0
Parent's number of children			−11.6***	1.8
Parent's number of children aged 0–17 years			−7.9	14.3
Parent's marital history and status (first marriage omitted)				
Ever divorced, currently married or partnered			−43.4***	11.9
Ever divorced, currently no partner			−17.4	13.9
Ever widowed, currently married or partnered			−26.1*	12.7
Ever widowed, currently no partner			34.8***	6.5
Parent's educational level (years)			−2.0*	0.9
Parent's employment (not employed omitted)				
Employed part-time			−1.6	6.6
Employed full-time			2.1	5.9
Parent's functional capacity (6–30)			0.3	0.8
Child's age			−2.5***	0.5
Child having partner (no, yes)			−17.5***	4.7
Child having children (no, yes)			12.7**	4.4
Child's employment (not employed omitted)				
Employed part-time			5.6	5.4
Employed full-time			−4.8	4.6
Gender				
Father and daughter			14.0*	5.5

Table 3. (*Continued*)

Variable	Contact Frequency (Days per Year)			
	Model 1		Model 2	
	B	SE	*B*	SE
Mother and son			−7.8	6.8
Mother and daughter			25.1***	7.1
Geographic proximity (>15 minutes omitted)				
Coresiding			239.9***	7.1
No coresidence; within 15 minutes traveling time			59.6***	3.7
Estimated parameters	1		22	
Deviance	40,759.4		39,294.6	

Variable	Emotional Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Intercept	1.56***	0.08	4.75	−3.16*	1.56	0.04	1.28***	0.08	3.60	−3.39*	1.60	0.03
Interval (years divided by 10)	−0.33**	0.11	0.72	−0.31*	0.14	0.73	0.33**	0.11	1.39	0.32*	0.14	1.38
Parent's age				0.06**	0.02	1.07				0.06*	0.03	1.06
Parent's number of children				−0.07	0.04	0.93				−0.05	0.04	0.95
Parent's number of children aged 0–17 years				−0.04	0.44	0.96				−0.71	0.42	0.49
Parent's marital history and status (first marriage omitted)												
Ever divorced, currently married or partnered				−0.65*	0.32	0.52				−0.61	0.33	0.54
Ever divorced, currently no partner				−0.28	0.40	0.76				−0.55	0.38	0.58
Ever widowed, currently married or partnered				−0.80*	0.35	0.45				−1.15***	0.35	0.32
Ever widowed, currently no partner				0.26	0.20	1.29				0.09	0.20	1.09

Parent's educational level (years)				0.07***	0.02	1.07				0.07**	0.02	1.07
Employed part-time				0.08	0.21	1.08				0.01	0.21	1.01
Employed full-time				0.22	0.20	1.24				−0.41*	0.19	0.66
Parent's functional capacity (6–30)				0.03	0.02	1.03				0.05*	0.02	1.05
Child's age				−0.04*	0.02	0.96				−0.04**	0.02	0.96
Child having partner (no, yes)				0.31	0.17	1.36				−0.04	0.17	0.96
Child having children (no, yes)				0.12	0.16	1.13				0.05	0.16	1.05
Child's employment (not employed omitted)												
Employed part-time				0.27	0.20	1.31				0.27	0.21	1.30
Employed full-time				0.15	0.17	1.16				0.10	0.17	1.10
Gender												
Father and daughter				0.22	0.17	1.24				0.22	0.18	1.24
Mother and son				0.64***	0.18	1.90				0.33	0.18	1.40
Mother and daughter				1.19***	0.20	3.28				1.13***	0.21	3.09
Geographic proximity (>15 minutes omitted)												
Coresiding				0.40	0.25	1.49				0.33	0.25	1.39
No coresidence; within 15 minutes traveling time				−0.18	0.13	0.83				0.01	0.13	1.01
Estimated parameters	1			22			1			22		
Deviance	2,185.1			1,954.9			2,112.6			1,840.0		

Variable	Instrumental Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Intercept	−0.21***	0.06	0.81	1.38	1.27	3.98	0.31***	0.06	1.36	0.96	1.30	2.61
Interval (years divided by 10)	−0.14	0.09	0.87	−0.07	0.11	0.93	−0.24**	0.09	0.79	−0.10	0.11	0.91
Parent's age				0.00	0.02	1.00				−0.04	0.02	0.96
Parent's number of children				−0.02	0.03	0.98				−0.05	0.03	0.96
Parent's number of children aged 0–17 years				−1.09*	0.48	0.34				−0.35	0.39	0.71
Parent's marital history and status (first marriage omitted)												
Ever divorced, currently married or partnered				−0.15	0.30	0.86				−1.13***	0.31	0.32
Ever divorced, currently no partner				0.09	0.33	1.09				−0.29	0.32	0.75

Table 3. (*Continued*)

Variable	Instrumental Support (no, yes)											
	Received						Given					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	e^B	*B*	SE	e^B	*B*	SE	e^B	*B*	SE	e^B
Ever widowed, currently married or partnered				−0.34	0.34	0.71				−0.33	0.32	0.72
Ever widowed, currently no partner				0.72***	0.15	2.06				−0.47**	0.15	0.62
Parent's educational level (years)				−0.01	0.02	0.99				0.00	0.02	1.00
Parent's employment (not employed omitted)												
Employed part-time				0.00	0.16	1.00				−0.26	0.16	0.77
Employed full-time				−0.31	0.16	0.73				−0.49**	0.16	0.61
Parent's functional capacity (6–30)				−0.05*	0.02	0.95				0.11***	0.02	1.12
Child's age				−0.01	0.01	0.99				−0.05***	0.01	0.96
Child having partner (no, yes)				0.10	0.14	1.10				−0.34*	0.14	0.71
Child having children (no, yes)				−0.23	0.13	0.80				0.26*	0.13	1.30
Child's employment (not employed omitted)												
Employed part-time				0.01	0.16	1.01				0.08	0.16	1.08
Employed full-time				0.01	0.14	1.01				−0.01	0.14	0.99
Gender												
Father and daughter				−0.10	0.15	0.90				0.07	0.15	1.07
Mother and son				−0.28	0.15	0.76				−0.56***	0.15	0.57
Mother and daughter				−0.22	0.16	0.80				−0.05	0.16	0.96
Geographic proximity (>15 minutes omitted												
Coresiding				1.67***	0.20	5.31				1.14***	0.21	3.13
No coresidence; within 15 minutes traveling time				0.35***	0.10	1.41				0.38***	0.10	1.47
Estimated parameters	1			22			1			22		
Deviance	3,151.8			2,967.7			3,160.9			2,924.5		

Note: e^B, Exponentiated B.
*$p<0.05$;
**$p<0.01$;
***$p<0.001$.

exchange more emotional support than younger parents. Although the number of children has an effect on contact frequency, no effect was found for support exchange. Ever-divorced parents with a new partner receive less emotional support from children and give less instrumental support. Widowed parents with no partner receive more, but give less, instrumental support, and those who are widowed with a new partner exchange less emotional support. Parents who work full-time give less emotional support to their children. Functional capacity had no effect on emotional support received. Parents with children receive less emotional support. Having grandchildren increases the instrumental support given to children. Children's employment has no effect on the support given by parents, nor was any effect found on support exchange between fathers and daughters. Mothers receive more emotional support from children and give less instrumental support to sons; however, no effect was found on emotional support given and instrumental support received. Also, no effect was found for parents coresiding with a child and emotional support received.

It can be concluded that within the late cohort, when the characteristics of parents, children and relationships are taken into account, there is more frequent contact between parents and their children. Supportive exchanges within the late cohort are equal to or more intense than those in the early cohort, particularly the support given by parents. Furthermore, the results of the longitudinal analysis show that over time, parents have less frequency of contact and receive less support from their children.

DISCUSSION

Over the past few decades, sociologists and demographers have reinforced the idea that the macrostructural trends that have taken place in Western societies have been destructive to traditional family functions, family support, in particular. Previous studies have considered the effects of macrostructural trends on intergenerational relationships, focusing predominantly on demographic changes. This article has taken a different approach and focuses on the extent to which individual consequences of macrostructural trends are related to contact and support exchange between parents and adult children. We tested the hypothesis that because of social changes in the Netherlands (which have influenced the life experiences of individuals and their families), parents and children would have had fewer opportunities for contact and support exchange in 2002 than they did in the beginning of the 1990s.

Our analyses first showed that contact and support exchange could only be partially explained by these opportunities. Parents who have divorced have less contact with their children. Those who have no new partner give less emotional support. Given that fathers who have divorced often become marginal in the lives of their children, this suggests that they may have less contact and receive less support when they age. The timing of the divorce, or re-partnering after widowhood, most probably also plays an important role in this process. Also, the quality of the early relationship between parents and children influences later contact and exchanges of support (Aquilino, 1999). Family structures have become more heterogeneous, with many divorced parents remarrying, thereby allowing a stable, child-supportive family context to develop (Bengtson, 2001). Hence, the full effect on parent–child relations of marital instability and new relationships after widowhood will not be seen until the cohorts in our study become dependent.

The effects of labor-force participation differed in the various analyses. Whereas no effect of employment of parents and the adult child was found on contact, we did find a negative effect from the parent's employment on instrumental support given and a positive effect from the adult child's part-time employment on support given. Therefore, in general, contrary to what might be expected, employment does not negatively influence the contact and emotional support exchanged between parents and children. Part-time work enables women to combine the tasks of work and support; however, this may change in the future if the full-time employment of women increases further in the Netherlands. Tension may then be placed on the equilibrium between work and family, which, in turn, may result in a decreasing capacity to provide support to aged parents. Considering that our study pertains to parents who have few functional problems, we might have found different results for the employment of children if we had included parents who were older and had more functional limitations.

The results of our study also show that family support goes beyond the nuclear household. Consistent with earlier findings (Cooney & Uhlenberg, 1992), the results confirm that the process of children leaving the parental home is a major transition in the life of the parents. In particular, parents with children coresiding have more contact, exchange more instrumental support and receive more emotional support than those who do not coreside with children. According to Aquilino (1997), leaving home reduces the intensity of the parents' relationships with adult children. Both the parent and adult child are entering a new stage of the life course, and roles and

expectations are reevaluated. However, although parents and children coreside less (both between cohorts as well as longitudinally), they more often live nearby. We find that parents who have adult children living nearby have more contact and exchange more instrumental support with their children than those who live farther away.

There are also other effects of the characteristics of the respondent, child and relationship on contact and support exchange: Parents with fewer children have on average more contact (which will be discussed below). Consistent with previous research, parents with a higher education have less contact but exchange more emotional support with their children. Although functional capacity had no effect on contact frequency, consistent with prior research, parents with a higher functional capacity give more support than those with less functional capacity. Parents with younger or single children have more contact with their children. These children are still in the launching phase of their life course and often have not yet committed themselves to labor participation and a new family, so their attention is probably still directed towards the family of origin. In contrast to our expectations, having grandchildren has a positive effect on contact. The increased participation of women in the labor force may require grandparents to help to care for their grandchildren. Finally, confirming the well-known role of women as kin keepers, mothers and daughters have more contact with each other and exchange more emotional support.

This study shows that, when respondent, child and relationship characteristics are controlled, the contact was more frequent and more support was exchanged between parents and children in 2002 than in 1992. These results reflect both cohort and period effects, controlled for age effects. It may be argued that our results show, on the one hand, that contact and support exchange increase per child and, on the other hand, that parent–child relationships actually become less important over historical time because there are fewer of them. On the basis of our results, it is indeed not possible to conclude whether there is an increase of contact and support at the family level. Calculations at the family level cannot be made because we do not know whether the children all visit at the same time or separately, and our measurements of support exchange are not exact.

Given that the pattern for increased contact and exchange of support over historical time can only be partially explained by opportunity, how can this increase be explained? We believe that the changes that have taken place in attitudes towards the family have had a more profound effect on parent–child relationships than social developments such as the increase of female participation in the labor market or an increase in divorce and

remarriage. Hence, the hypothesis that contact and exchanges of support between parents and children have decreased because of social change cannot be confirmed. Part of the late cohort can be characterized as the protest generation (compare the Vietnam-generation in the U.S.), who were in their so-called formative years during the cultural revolution of the 1960s and 1970s (Sanders & Becker, 1994). In this respect Inglehart (1977) has argued that socialization during the formative years leads to value orientations that remain relatively stable during the life course. In comparison to the early cohort, the attitudes and behavior of the late cohort are guided more by principles of equality and autonomy (Stacy, 1993). Consequently, the greater autonomy in these relationships allows for relationships based on individual "commitments" rather than "fixed obligations" (Finch, 1989). We can assume that this has an effect on the parenting of this cohort, accentuating freedom, companionship and negotiation. An important characteristic of negotiation is intensive communication about differing opinions among parents and children (Du Bois-Reymond, 1998), which ultimately results in more contact. Still, there might also be other explanations for the increased contact between parents and adult children, such as the technological advances that allow new forms of communication. Frequency of contact is no longer confined to face-to-face contact but also includes other forms of contact such as telephoning or emailing.

Longitudinally, we find that as parents age (from about 60 until they are around 70), there is less contact with their adult children and less support is exchanged. This agrees with earlier research confirming that both parents and children tend to devote less time and energy to intergenerational relationships during this "empty nest" phase, which is confirmed by our results. Moreover, this finding provides an explanation for the persistence of the notion of a "breakdown" of family support. The idea that contact and support decline over time is genuine; however, it may only hold for certain periods in one's life, such as when children go through the transition from young adulthood to mature adulthood and become more independent. When comparing our two cohorts, we find no evidence for the myth of family decline, confirming, the reasoning that the "good old days" are not earlier periods in our social history, but a period in the history of each individual and family (Brody, 1985). The combination of a cohort and longitudinal analysis in this study has allowed us to study intergenerational relationships from different perspectives. However, we were not able to fully address the different effects because we could not apply a cohort-sequential design. From the cohort analysis, it is therefore difficult to disentangle

whether the effects were primarily related to cohort or period; within the longitudinal analysis, we cannot be conclusive about the age and period effects. We believe that the reverse results – an increase between cohorts and a decrease longitudinally – suggests that the longitudinal results show an effect of aging and not of period.

A number of limitations of the study should be noted. We had no information on the attitudes towards the family, such as norms on filial obligation and which qualities the family environment should encourage in children. Consequently, we have no empirical evidence about how family attitudes have changed or what possible connections there might be between attitudes towards family and intergenerational relationships. We also did not assess any changes that might have taken place in the attitudes people have towards divorce, labor-force employment or geographical proximity, in relation to contact and support within family relationships. On the individual level, for example, women may choose to either participate in the labor force or to commit themselves to family care. On the societal level, changes may take place concerning norms about the combination of work and care giving to kin. Another limitation is that the information on contact frequency and support exchanged was obtained from the parents. As outlined in the descriptions of the measurements, there is low veridicality of the reports of parents and those of their children on relationship characteristics, in particular on the instrumental support exchanged and, even more, on the emotional support exchanged. There are always different perspectives in a personal relationship, especially if it concerns the parent–child relationship. However, the results of a previous study by Klein Ikkink, Van Tilburg, and Knipscheer (1999) show numerous congruencies across the parents' and children's reports with respect to the factors that influence the support parents receive.

In sum, our results show that the functions of families have not been reduced. They support the existence of a family in which parents and adult children maintain frequent contact and exchange support while residing in separate households. Moreover, we find that across cohorts, parents have more contact and exchange more support with their adult children when we take into account the decline in coresidence. Macrostructural changes have had a less destructive influence on parent–child relationships than we initially thought. Our results show only a small snapshot of a larger picture of family change within a post-modern era. Whether smaller families are characterized by improved relationships will be even more evident within future cohorts and requires further research. We therefore encourage future research over longer periods and with later cohorts.

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REFERENCES

Aboderin, I. (2004). Modernisation and ageing theory revisited: Current explanations of recent developing world and historical Western shifts in material family support for older people. *Ageing and Society*, *24*, 29–50.

Aquilino, W. S. (1994). Later life parental divorce and widowhood: Impact on young adults' assessment of parent–child relations. *Journal of Marriage and the Family*, *56*, 908–922.

Aquilino, W. S. (1997). From adolescent to young adult: A prospective study of parent–child relations during the transition to adulthood. *Journal of Marriage and the Family*, *59*, 670–686.

Aquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and the Family*, *61*, 858–870.

Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, *63*, 1–16.

Bethlehem, J. G., & Kersten, H. M. P. (1982). Nonresponse in Dutch sample surveys. *Statistical Journal of the United Nations*, *1*, 253–268.

Brody, E. M. (1985). Parent care as a normative stress. *The Gerontologist*, *25*, 19–29.

Broese van Groenou, M. I., & Van Tilburg, T. G. (2003). Network size and support in old age: Differentials by socio-economic status in childhood and adulthood. *Ageing and Society*, *23*, 625–645.

Burgess, E. W. (1916). *The function of socialization in social evolution*. Chicago: University of Chicago Press.

Cochran, M., Larner, M., Riley, D., Gunnarson, L., & Henderson, C. R. (1990). *Extending families: The social networks of parents and their children*. Cambridge, UK: Cambridge University Press.

Cooney, T. M., & Uhlenberg, P. (1992). Support from parents over the life course: The adult child's perspective. *Social Forces*, *71*, 63–84.

De Jong A. (1999). Trouwen en scheiden: Lichte restauratie op komst. *Maandstatistiek van de Bevolking*. [Marriage and divorce: Recovery in sigh.], *47*, 8–16.

De Jong Gierveld, J. (1998). Intergenerational relationships and solidarity within the family. In: K. Matthijs (Ed.), *The family: Contemporary perspectives and challenges* (pp. 31–49). Leuven: Leuven University Press.

Deeg, D. J. H., Knipscheer, C. P. M., & Van Tilburg, W. (1993). *Autonomy and well-being in the aging population: Concepts and design of the longitudinal aging study Amsterdam*. Bunnik, The Netherlands: Netherlands Institute of Gerontology.

Du Bois-Reymond, M. (1998). Negotiation strategies in modern families: What does it mean for global citizenship? In: K. Matthijs (Ed.), *The family: Contemporary perspectives and challenges* (pp. 57–71). Leuven, Belgium: Leuven University Press.

Eggebeen, D. (1992). Family structure and intergenerational exchanges. *Research on Aging*, *14*, 427–447.

Finch, J. (1989). *Kinship obligations and family change*. Cambridge: Polity Press.

Greenwell, L., & Bengtson, V. L. (1997). Geographic distance and contact between middle-aged children and their parents: The effects of social class over 20 years. *Journal of Gerontology*, *52B*, S13–S26.

Hareven, T. K. (1995). Historical perspectives on the family and aging. In: R. Blieszner & V. Hilkevitch Bedford (Eds), *Handbook of aging and the family* (pp. 13–31). London: Greenwood.

Inglehart, R. (1977). *The silent revolution: Changing values and political styles among Western publics*. Princeton, NJ: Princeton University Press.

Kalmijn, M., De Graaf, P. M., & Poortman, A. (2004). Interactions between cultural and economic determinants of divorce in The Netherlands. *Journal of Marriage and the Family*, *66*, 75–89.

Kaufman, G., & Uhlenberg, P. (1998). Effects of life course transitions on the quality of relationships between adult children and their parents. *Journal of Marriage and the Family*, *60*, 924–938.

Klein Ikkink, K., Van Tilburg, T. G., & Knipscheer, C. P. M. (1999). Perceived instrumental support exchanges in relationships between elderly parents and their adult children: Normative and structural explanations. *Journal of Marriage and the Family*, *61*, 831–844.

Knipscheer, C. P. M., De Jong Gierveld, J., Van Tilburg, T. G., & Dykstra, P. A. (Eds). (1995). *Living arrangements and social networks of older adults*. Amsterdam: VU University Press.

Lawton, L., Silverstein, M., & Bengtson, V. L. (1994). Affection, social contact, and geographic distance between adult children and their parents. *Journal of Marriage and the Family*, *56*, 57–68.

Lee, G. R., Dwyer, J. W., & Coward, R. T. (1993). Gender differences in parent care: Demographic factors and same-gender preferences. *Journal of Marriage and the Family*, *56*, 57–68.

Liefbroer, A. C., & De Jong Gierveld, J. (1995). Living arrangements, socio-economic resources, and health. In: C. P. M. Knipscheer, J. De Jong Gierveld, T. G. van Tilburg & P. A. Dykstra (Eds), *Living arrangements and social networks of older adults* (pp. 15–36). Amsterdam: VU University Press.

Mancini, J. A., & Blieszner, R. (1989). Aging parents and adult children: Research themes in intergenerational relations. *Journal of Marriage and the Family*, *51*, 275–290.

Morgan, D. L., Schuster, T. L., & Butler, E. W. (1991). Role reversals in the exchange of social support. *Journal of Gerontology*, *46*, S278–S287.

Popenoe, D. (1993). American family decline, 1960–1990: A review and appraisal. *Journal of Marriage and the Family*, *55*, 527–555.

Portegijs, W., Boelens, A., & Keuzenkamp, S. (2002). *Emancipation monitor 2002*. Den Haag, The Netherlands: SCP/CBS.

Rasbash, J., & Woodhouse, G. (1995). *MLn command reference*, version 1.0. University of London, Institute of Education, Multilevels project.

Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent–child relations across the life course*. New York: Aldine de Gruyter.

Sanders, K., & Becker, H. A. (1994). The transition from education to work and social independence: A comparison between the United States, the Netherlands, West Germany, and the United Kingdom. *European Sociological Review*, *10*, 135–154.

Shanas, E. (1979). The family as a social support system in old age. *Gerontologist*, *19*, 169–174.

Silverstein, M., Burholt, V., Wenger, G. C., & Bengtson, V. L. (1998). Parent–child relations among very old parents in Wales and the United States: A test of modernization theory. *Journal of Aging Studies*, *12*, 387–409.

Social and Cultural Planning Office. (2000). *Social and cultural Report 2000: The Netherlands in a European perspective*. Rijswijk/Den Haag, The Netherlands: SCP/VUGA.

Spitze, G., & Logan, J. (1990). More evidence on women (and men) in the middle. *Research on Aging*, *12*, 182–198.

Stacy, J. (1993). Is the sky falling? *Journal of Marriage and the Family*, *55*, 555–559.

Suitor, J. J., Pillemer, K., Keeton, S., & Robison, J. (1995). Aged parents and aging children: Determinants of relationship quality. In: R. Blieszner & V. Hilkevitch Bedford (Eds), *Handbook of aging and the family* (pp. 223–242). London: Greenwood.

Troll, L. E. (1971). The family of later life: A decade review. *Journal of Marriage and the Family*, *33*, 263–290.

Van Tilburg, T. G. (1995). Delineation of the social network and differences in network size. In: C. P. M. Knipscheer, J. De Jong Gierveld, T. G. van Tilburg & P. A. Dykstra (Eds), *Living arrangements and social networks of older adults* (pp. 83–96). Amsterdam: VU University Press.

Van Tilburg, T. G., & Broese van Groenou, M. I. (2002). Network and health changes among older Dutch adults. *Journal of Social Issues*, *58*, 697–713.

Vollenwyder, N., Bickel, J., d'Epinay, L., & Maystre, C. (2002). The elderly and their families, 1979–94: Changing networks and relationships. *Current Sociology*, *50*, 263–280.

White, L., & Rogers, S. J. (1997). Strong support but uneasy relationships: Coresidence and adult children's relationships with their parents. *Journal of Marriage and the Family*, *59*, 62–76.

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